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the 256 pixels of the macroblock. The blue chrominance (Cb) (U) and red chrominance (Cr) (V) data for the pixels of the macroblock are communicated at 1/4 resolution, or 64 bytes of U data and 64 bytes of V data for the macroblock and filtering is used to blend pixel colors. Other pixel encoding schemes can also be used.

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*Please replace the paragraph beginning on page 12, line 18 with:*

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B3

In one embodiment, the bounding box is defined by the upper left and lower right corners of the bounding box. The upper left of the bounding box is the origin of the macroblock included in the GFXBLOCK command. The lower right corner of the bounding box is computed by adding the region height and width to the origin.

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*Please replace the paragraph beginning on page 12, line 22 with:*

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In one embodiment, the bounding box computes a texture address offset,  $P_0$ , which is determined according to:

$$P_{0u} = \text{Origin}_x + MV_x \quad (\text{Equation 1})$$

and

$$P_{0v} = \text{Origin}_y + MV_y \quad (\text{Equation 2})$$

where  $P_{0v}$  and  $P_{0u}$  are offsets for  $v$  and  $u$  co-ordinates, respectively.  $\text{Origin}_x$  and  $\text{Origin}_y$  are the  $x$  and  $y$  co-ordinates of the bounding box origin, respectively, and  $MV_x$  and  $MV_y$  are the  $x$  and  $y$  components of the motion vector, respectively. The  $P_0$  term translates the texture addresses in a linear fashion.

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*Please replace the paragraph beginning on page 14, line 4 with:*

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Mapping address generator 615 provides read addresses to fetch unit 620. The read address generated by mapping address generator 615 and provided to fetch unit 620 are based on pixel movement between frames as described by the motion vector. This allows pixels stored in memory to be reused for a subsequent frame by rearranging the addresses of the pixels fetched. In one embodiment, the addresses generated by mapping address generator 615 using the values listed above simplify to:

$$v(x, y) = y + P_{0v} \quad (\text{Equation 5})$$

and

$$u(x, y) = x + P_{0u} \quad (\text{Equation 6})$$

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*Please replace the paragraph beginning on page 16, line 10 with:*

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The pixels read from texture palette 650 are input to blend unit 670. Blend unit 670 combines the pixel data from bilinear filter 625 with correction